AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A code generation apparatus to generate a source code using a ~~given~~ model containing ~~covering~~ at least two~~a plurality of~~ specific parts, either of which is only used in a system to which the generated source code is adapted~~variations~~, the apparatus comprising:

model acquisition means for acquiring the ~~given~~ model having the~~a plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

selection information acquisition means for acquiring selection information, from a source external to the code generation apparatus, capable of indicating ~~at least one of~~ selection ~~and deletion~~ of a ~~certain~~ specific part among~~of~~ the ~~plurality of~~ specific parts using a corresponding part specifier ~~specifying the certain specific part~~;

deletion and generation means for generating the source code from an intermediate ~~certain~~ model, which is generated from ~~using~~ the ~~given~~ model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means, the intermediate~~certain~~ model containing only ~~covering~~ a selected specific part ~~variation~~ selected from the ~~plurality of~~ specific parts~~variations~~ and not ~~and not~~ containing~~covering~~ any~~a~~ other ~~non-selected~~ specific part other than the selected specific part~~variation~~; and

a machine readable storage medium for storing the generated source code.

2. (currently amended) The code generation apparatus of claim 1,

wherein at least one part specifier includes a part specification block which encloses <u>one of</u> the specific part<u>s</u> of the ~~given~~ model, and

wherein the selection information acquisition means acquires the selection information indicating at least one of selection and deletion of the <u>one of the</u>~~certain~~ specific part<u>s</u> using the part specification block.

3. (currently amended) The code generation apparatus of claim 1,

wherein at least one part specifier includes attribute information that is included in <u>one of</u> the specific part<u>s</u> of the ~~given~~ model.

4. (currently amended) The code generation apparatus according to claim 1 further comprising:

correlative information acquisition means for acquiring correlative information indicating correlation between part specifiers respectively specifying the specific parts of the ~~given~~ model acquired by the model acquisition means and the selection information acquired by the selection information acquisition means,

wherein the deletion and generation means generates the source code from the <u>intermediate</u>~~certain~~ model that is generated using the ~~given~~ model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means and the correlative information acquired by the correlative information acquisition means.

5. (original) The code generation apparatus of claim 1,

wherein the selection information includes information about a model type relevant to the

source code generated by the deletion and generation means.

6. (original) The code generation apparatus of claim 1,

wherein the selection information includes information about a destination country relevant

to the source code generated by the deletion and generation means.

7. (original) The code generation apparatus of claim 1,

wherein the selection information includes information about an intended use relevant to

the source code generated by the deletion and generation means.

8. (currently amended) A computer program product on a computer readable medium for

use in a code generation apparatus to generate a source code using a ~~given model~~model

containing at least two specific parts~~covering a plurality of variations~~, the computer program

product comprising instructions for :

acquiring the ~~given~~ model ~~having a plurality of~~containing the specific parts, each specific

part being specified by a part specifier~~, each specific part corresponding to at least one

variationamong the plurality of variations~~;

acquiring selection information, from a source external to the code generation apparatus,

capable of indicating ~~at least one of~~selection ~~and deletion~~of a ~~certain~~specific part ~~of~~among the

~~plurality of~~ specific parts using a part specifier <u>corresponding to the specific part among the specific parts</u>~~specifying the certain specific part~~;

generating the source code from a<u>n intermediate</u> ~~certain~~ model, which is generated ~~using~~<u>from</u> the acquired ~~given~~ model based on the acquired selection information, the ~~certain~~<u>intermediate</u> model ~~covering~~<u>containing only</u> a selected <u>specific part</u>~~variation~~ selected from the <u>specific parts</u>~~plurality of variations~~ and not ~~covering a non-selected variation~~<u>containing any other specific part other than the selected specific part</u>; and

storing the generated source code in a machine readable storage medium.

9. (currently amended) A simulation apparatus for executing functions included in a ~~certain~~<u>n intermediate</u> model generated ~~using~~<u>from</u> a ~~given~~ model <u>containing at least two specific parts</u>~~covering a plurality of variations~~, the apparatus comprising:

model acquisition means for acquiring the ~~given~~ model <u>containing the</u>~~having a plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

selection information acquisition means for acquiring selection information, from a source external to the simulation apparatus, capable of indicating ~~at least one of~~ selection ~~and deletion~~ of a ~~certain~~ specific part <u>among</u>~~of~~ the ~~plurality of~~ specific parts, using a part specifier ~~specifying the certain~~<u>corresponding to the</u> specific part <u>among the specific parts</u>;

deletion and generation means for executing the functions included in the <u>intermediate</u>~~certain~~ model, which is generated <u>from</u>~~using~~ the ~~given~~ model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means, the <u>intermediate</u>~~certain~~ model <u>containing only</u>~~covering~~ a selected <u>specific</u>

part~~variation~~ selected from the specific parts~~plurality of variations~~ and not ~~covering a non-selected variation~~containing any other specific part other than the selected specific part; and

a machine readable storage medium for storing the generated ~~certain model~~intermediate model.

10. (currently amended) A computer program product on a computer readable medium for use in a simulation apparatus for executing functions included in an intermediate~~a certain~~ model generated from~~using~~ a ~~given~~model containing at least two specific parts~~covering a plurality of variations~~, the computer program product comprising instructions of:

acquiring the ~~given~~model containing the~~having a plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

acquiring selection information, from a source external to the simulation apparatus, capable of indicating ~~at least one of~~selection ~~and deletion~~of a ~~certain~~specific part among~~of~~ the ~~plurality of~~specific parts using a part specifier corresponding to~~specifying~~ the ~~certain~~specific part among the specific parts; and

executing the functions included in the intermediate~~certain~~ model, which is generated from~~using~~ the acquired ~~given~~model based on the acquired selection information, the intermediate~~certain~~ model containing only~~covering~~ a selected specific part~~variation~~ selected from the specific parts~~plurality of variations~~ and not ~~covering a non-selected variation~~containing any other specific part other than the selected specific part.

11. (currently amended) A model generation apparatus to generate <u>an intermediate</u>~~a certain~~ model <u>from</u>~~using~~ a ~~given~~ model <u>containing at least two specific parts</u>~~covering a plurality of variations~~, the apparatus comprising:

model acquisition means for acquiring the ~~given~~ model <u>containing the</u>~~having a plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

selection information acquisition means for acquiring selection information, from a source external to the model generation apparatus, capable of indicating ~~at least one of~~ selection ~~and deletion~~ of a ~~certain~~ specific part <u>among</u>~~of~~ the ~~plurality of~~ specific parts using a part specifier ~~specifying the certain~~<u>corresponding to the</u> specific part<u> among the specific parts</u>; and

deletion and generation means for generating the <u>intermediate</u>~~certain~~ model, which is generated <u>from</u>~~using~~ the ~~given~~ model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means, the <u>intermediate</u>~~certain~~ model <u>containing only</u>~~covering~~ a selected <u>specific part</u>~~variation~~ selected from the <u>specific parts</u>~~plurality of variations~~ and not ~~covering a non-selected variation~~<u>containing only other specific parts other than the selected specific part</u>; and

a machine readable storage medium for storing the generated ~~certain model~~<u>intermediate model</u>.

12. (currently amended) A computer program product on a computer readable medium for use in a model generation apparatus to generate <u>an intermediate</u>~~a certain~~ model <u>from</u>~~using~~ a ~~given~~ model <u>containing at least two specific parts</u>~~covering a plurality of variations~~, the computer program product comprising instructions for:

acquiring the ~~given~~ model ~~having~~containing thea ~~plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

acquiring selection information, from a source external to the model generation apparatus, capable of indicating ~~at least one of~~selection ~~and deletion~~ of a ~~certain~~specific part among~~of~~ the ~~plurality of~~specific parts using a part specifier corresponding to~~specifying~~ the ~~certain~~specific part among the specific parts; and

generating the intermediate~~certain~~ model~~, which~~ ~~that is generated using~~ from the acquired ~~given~~ model based on the acquired selection information, the intermediate~~certain~~ model containing only~~covering~~ a selected specific part~~variation~~ selected from the specific parts~~plurality of variations~~ and not ~~covering a non-selected variation~~containing any other specific part other than the selected specific part.

13. (currently amended) A method in a code generation apparatus to generate a source code using a ~~given~~model containing at least two specific parts~~covering a plurality of variations~~, the method comprising steps of:

acquiring the ~~given~~model containing the~~having a plurality of~~ specific parts~~, each specific part being specified by a part specifier, each specific part corresponding to at least one variation among the plurality of variations~~;

acquiring selection information, from a source external to the code generation apparatus, capable of indicating ~~at least one of~~selection ~~and deletion~~ of a ~~certain~~specific part among the specific parts using a part specifier ~~specifying the certain~~corresponding to the specific part among the specific parts; and

generating the source code from an intermediate~~certain~~ model, which is generated using the acquired ~~given~~ model based on the acquired selection information, the intermediate~~certain~~ model containing only~~covering a~~ selected specific part~~variation~~ selected from the specific parts~~plurality of variations~~ and not ~~covering a non-selected variation~~containing any other specific part other than the selected specific part.

14. (currently amended) A code generation apparatus to generate a source code using a ~~given~~ model containing at least two specific parts~~covering a plurality of variations~~, the apparatus comprising:

model acquisition means for acquiring the ~~given~~ model containing the~~having a plurality of~~ specific parts~~each, wherein each of the plurality of specific parts included in the given model is specified by each of a plurality of part specifiers, each specific part corresponding to at least one variation among the plurality of variations~~;

selection information acquisition means for acquiring selection information, from a source external to the code generation apparatus, indicating ~~at least one of~~ selection ~~and deletion~~ of a ~~given~~ specific part among the specific parts using a ~~given~~ part specifier ~~that specifies the given specific part~~corresponding to the specific part among the specific parts;

deletion and generation means for generating the source code from an intermediate~~a certain~~ model, which is generated from~~using~~ the ~~given~~ model acquired by the model acquisition means based on the selection information acquired by the selection information acquisition means, the intermediate~~certain~~ model ~~covering a~~containing only a selected specific part~~variation~~ selected from the specific parts~~plurality of variations~~ and not ~~covering a non-selected variation~~ any other specific part other than the selected specific part; and

a machine readable storage medium for storing the generated source code.

15. (currently amended) The code generation apparatus of claim 1, wherein the ~~variations are~~specific parts of the model correspond to functions exclusive to each other in the generated ~~certain~~intermediate model.

16. (currently amended) The code generation apparatus of claim 1, wherein the ~~variations are~~specific parts of the model correspond to types different from each other.

17. (currently amended) The code generation apparatus of claim 16, wherein the ~~variations are~~specific parts of the model correspond to types of engines.

18. (currently amended) The code generation apparatus of claim 1, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

19. (currently amended) The code generation apparatus of claim 1, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

20. (currently amended) The code generation apparatus of claim 1, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regenerations being different from each other.

21. (currently amended) The product of claim 8, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

22. (currently amended) The product of claim 8, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

23. (currently amended) The product of claim 8, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

24. (currently amended) The product of claim 8, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

25. (currently amended) The apparatus of claim 9, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

26. (currently amended) The apparatus of claim 9, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

27. (currently amended) The apparatus of claim 9, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

28. (currently amended) The apparatus of claim 9, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

29. (currently amended) The product of claim 10, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

30. (currently amended) The product of claim 10, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

31. (currently amended) The product of claim 10, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

32. (currently amended) The product of claim 10, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

33. (currently amended) The apparatus of claim 11, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

34. (currently amended) The apparatus of claim 11, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

35. (currently amended) The apparatus of claim 11, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

36. (currently amended) The apparatus of claim 11, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

37. (currently amended) The product of claim 12, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

38. (currently amended) The product of claim 12, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

39. (currently amended) The product of claim 12, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

40. (currently amended) The product of claim 12, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

41. (currently amended) The method of claim 13, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

42. (currently amended) The method of claim 13, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

43. (currently amended) The method of claim 13, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

44. (currently amended) The method of claim 13, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the regulations being different from each other.

45. (currently amended) The apparatus of claim 14, wherein the ~~variations are~~specific parts of the model correspond to different types of engines.

46. (currently amended) The apparatus of claim 14, wherein the ~~variations are~~specific parts of the model correspond to destination countries which are different from each other.

47. (currently amended) The apparatus of claim 14, wherein the ~~variations are~~specific parts of the model correspond to intended uses which are different from each other.

48. (currently amended) The apparatus of claim 14, wherein the ~~variations are~~specific parts of the model correspond to regulations according to domestic laws of countries, the

regulations being different from each other.

49. (new) The code generation apparatus according to claim 1, wherein:

the system relates to a vehicle; and

the specific parts individually correspond to variations of engine types of the vehicle.

50. (new) A code generation apparatus for generating part-specific source code for compiling into a part-specific executable program, the part-specific executable program for executing on a target electronic control unit (ECU) associated with a vehicle system, the target ECU for operating a specific part using the part-specific executable program, the apparatus comprising:

model acquisition means for acquiring a combined model containing information for generating source code associated with a plurality of parts, each of which is capable of being selected as the specific part in the vehicle system;

selection information acquisition means for acquiring selection information from an external source, the selection information indicating a selection of the specific part among the plurality parts;

searching means for searching the combined model containing the information for generating source code associated with the plurality of parts to find part-specific information for generating the part-specific source code associated with the specific part matching the selection information acquired by the selection information acquisition means;

intermediate model generation means for deleting portions of the information for generating source code associated with the plurality of parts from the combined model to form

an intermediate model, the intermediate model containing only information for generating the part-specific source code; and

generation means for generating the part-specific source code from the information for generating the part-specific source code contained in the intermediate model.

51. (new) The code generation apparatus according to claim 50, wherein:

the specific parts individually correspond to variations of engine types of the vehicle system.

52. (new) The code generation apparatus of claim 1, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and the deletion and generation means deletes the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

53. (new) The product of claim 8, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and further comprising instructions of deleting the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

54. (new) The apparatus of claim 9, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and the deletion and generation means deletes the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

55. (new) The product of claim 10, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and further comprising instructions of deleting the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

56. (new) The apparatus of claim 11, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and the deletion and generation means deletes the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

57. (new) The product of claim 12, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and further comprising instructions for deleting the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

58. (new) The method of claim 13, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and further comprising deleting the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

59. (new) The apparatus of claim 14, wherein each of the at least two specific parts of the model is specified by a corresponding part specifier, and the deletion and generation means

deletes the specifier of the selected specific part so that the intermediate model does not contain the specifier of the selected specific part.

60. (new) The apparatus of claim 50, wherein each of the plurality of parts contained in the combined model is specified by a corresponding part specifier, and the intermediate mode generation means deletes the specifiers of each of the parts so that the intermediate model does not contain the specifiers of each of the parts.